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David J. Green

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CHRISTOPHER P. MAIORANA, P.C.

24840 HARPER SUITE 100

ST. CLAIR SHORES, MI 48080

EXAMINER

EHICHIOYA, FRED I

ART UNIT

PAPER NUMBER

2162

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/916,453	<b>Applicant(s)</b> GREEN ET AL.	
	<b>Examiner</b> Fred I. Ehichioya	<b>Art Unit</b> 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 - 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1 – 21 are pending in this Office Action

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on February 9, 2004, August 23, 2004, November 17, 2004 and August 8, 2005 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

#### ***Double Patenting***

3. The terminal disclaimer filed on August 22, 2005 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of 09/992,652 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Response to Arguments/Remarks***

4. Applicants' arguments, with respect to claims 1 – 20 have been fully considered and but are not are persuasive. Therefore, the rejection under 35 U.S.C. 103 of last Office Action is proper.

Applicants argue:

***(a) Winter does not appear to disclose or suggest a step for generating a programming item from a plurality of parameters that define a program for customizing a programmable logic device, the programmable logic device being configurable by a customer using the programming item after manufacturing has being completed (page 9, paragraph 1).***

Examiner respectfully disagrees with the applicants. Examiner wishes to submit that applicants' argument and claim limitation is not supported by the specification.

The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. "Customizing" a programmable logic device and "configurable by a customer" using said programming item after "manufacturing" are not defined in the specification.

**(b) Winter appears to be silent regarding a plurality of parameters used to generate the hexadecimal values. Claim 11 and 20 provide language similar to claim 1. therefore, the examiner is respectfully request to either (i) identify the parameters of Winter allegedly used to generate the hexadecimal used to generate the hexadecimal and decimal values or (ii) withdraw the rejection (page 10, paragraph 1).**

Firstly, examiner submits that the rejection of last Office Action is proper; secondly applicants' argument is not based on claim limitation. It is noted that the features upon which applicant relies (i.e., "*plurality of parameters used to generate the hexadecimal values*") are not recited in the rejected claim(s). However, Winter discloses parameters for programmable logic devices as claimed. As shown in column 4, lines 27 - 34, examiner interprets "entries and line counts" as parameters for programmable logic device.

**(c) Winter does not appear to use READ INPUT PORTH in generating any programmable data that is suitable for customizing any device and/or circuit (page 10, paragraph 2).**

As shown in response to argument (a), "Customizing" a programmable logic device is not defined in the specification.

**(d) Winter does not appear to disclose or suggest a structure comprising a storage medium and a computer program (page 11, paragraph 1).**

Examiner submits that Winter teaches "computer program" as shown in column 3, Table I and "storage medium" as shown in column 4, lines 2 – 6.

**(e) *Winter does not appear to disclose or suggest a means for storing at least one of the parameters used for generating the programming item in a non-programming field of the file.***

Examiner respectfully disagrees with the applicants. Firstly, applicants disclose in the specification page 8, lines 4 – 7 that “comment lines” are non-programming fields for storing parameters. Therefore, Winter discloses means for storing at least one parameter used for generating the programming item in a non-programming since Winter discloses comment lines as shown in column 4, Table III

**(f) *Winter and Muller are non-analogous art (page 12, paragraph 3)***

Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Winter teaches the claimed subject matter and non-programming field as discussed in response to argument (e) and Muller discloses “frequency parameter” as shown in column 7, lines 18 – 20. By combining Muller’s teaching of “storing a frequency parameter” would have allowed Winter’s system to transfer data to and from entity at multiple gigabits per second as suggested by Muller at column 2, lines 11 - 14. The advantage is that this will allow the transfer rate of data to exceed the network traffic of 1 Gbps (see also column 1, lines 60 – 67).

**(g) Winter and Muller, alone or in combination, do not appear to teach or suggest that a cyclic redundancy check checksum is configured to detect a bit swap within the file (page 13, paragraph 2).**

Examiner respectfully disagrees with the applicants. Examiner submits that applicants define "Bit swapping " as "swapping of values" (specification page 10, line 21 - page 11 line 2). Muller discloses cyclic redundancy check (CRC) in column 12, lines 42 – 46. Muller also discloses exchange of data (column 7, line 40). Examiner interprets "exchange of data" as swapping of values. Therefore, Muller teaches a cyclic redundancy check checksum is configured to detect a bit swap within the file as shown in column 12, lines 42 – 46 and column 7, line 40.

**(h) Muller alone, alone or in combination, do not appear to teach or suggest that the non-programming field is disposed in the first portion of the file, the programming item is disposed in a section portion of the file and the cyclic redundancy check checksum is disposed in a third portion of the file (page 14, paragraph 1).**

Examiner respectfully disagrees. Examiner submits that applicants' argument and claim limitations are not supported by the specification. The only mention of the word "dispose" in applicants' invention is in the background of the specification (page 2, lines 8 - 11 which states **A common practice is to dispose of the original device programming parameters once the file has been verified as correct and the programmed devices have gone into production.** If applicants agree that this paragraph cited is the same as limitation of claim 17 which applicant argued, Then this cited paragraph of the

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specification rejects claim 17 since it is well known in the art and common practice otherwise the claim limitation is not supported by the specification.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 11, 17 and 20 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. "customizing", "configurable by a customer", "after manufacturing has been completed", "disposed in a first portion", "disposed in a section portion" and disposed in a third portion" are not described in the specification in such a way as to reasonably convey to one skilled in the relevant art.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The term . "customizing", "configurable by a customer" "after manufacturing has been completed" in claims 1, 11 and 17; "disposed in a first portion", "disposed in a section portion" and disposed in a third portion" in claim 17 are relative terms which renders the claim indefinite. The term customizing", "configurable by a customer", "after



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manufacturing has been completed”, “disposed in a first portion”, “disposed in a section portion” and disposed in a third portion” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 9, 10, 11, 13, 15, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,805,862 issued to Winter et al (hereinafter “Winter”).

Regarding claims 1, 11 and 20, Winter teaches a method of generating a file suitable for programming a programmable logic device (***Examiner submits that applicants disclose in specification page 16, lines 1 – 3 that the invention may be implemented by interconnecting an appropriate network of conventional component circuits.*** Examiner interprets “electronic circuit” or “integrated circuit” as “programmable logic device”: column 2, lines 31 – 33), the method comprising the steps of:

(A) generating a programming item from a plurality of parameters that define a program for customizing a programmable logic device (Examiner interprets “a simulation input file is generated” as “generating a programming item” and “source code which contains instructions stored in a file” is interpreted as “parameters”: column 2, lines 54 – 62), said programmable logic device being configurable by a customer using said programming item after manufacturing has been completed (“configurable by customer” and “after manufacturing has been completed” are not supported by the specification, please refer to rejection under 35 USC § 112, first and second paragraph above);

(B) storing said programming item in a programming field of said file in response to generating (examiner interprets “binary base two values”, “decimal base ten values” and “zeros” stored in first and second lines as “storing said programming item a programming fields: column 3, lines 38 – 47); and

(C) storing at least one of said parameters for customizing (please refer to rejection under 35 USC § 112, first and second paragraph above) said programmable logic device in a non-programming field of said file (Examiner submits that applicants disclose in the specification page 8, lines 4 – 7 that “comment lines” are non-“programming fields for storing parameters”. Examiner interprets “comment lines” as “non-programming fields” and “entries in the table” are interpreted as “parameters”: column 4, lines 31 – 34).

Regarding claims 3 and 13, Winter teaches the step of second storing one of said parameters used for generating said programming item (Examiner interprets “a simulation input file is generated” as “generating a programming item”: column 2, line 54) in a second non-programming field of said file (Examiner interprets “comment lines” as “non-programming fields” and “entries in the table” are interpreted as “parameters”: column 4, table III and column 5, lines 10 - 11).

Regarding claims 5 and 15, Winter teaches the steps of:

Generating an error detection item (column 4, lines 14 - 15); and  
storing said error detection item in a second non-programming field of said file (Examiner interprets “comment lines” as “non-programming fields”: column 4, lines 16 – 17 and table III).

Regarding claims 9 and 19, Winter teaches the step of bracketing said non-programming field with a pair of delimiters (see Tables II, III and column 4, lines 65 - 67).

Regarding claim 10, Winter generating an error detection item (column 4, lines 10 - 15);

storing said error detection item in a second non-programming field of said file (column 5, lines 10 – 11 and column 4, lines 7 – 23 explains that these values are error detection items);

storing another of said parameters in a third non-programming field of said file (column 5, lines 12 - 13);

storing an identification item in a fourth non-programming field of said file (see Table III, "comment-table[03]=... ..", the identification item stored in this field is "6033 fc 10 24"); and

bracketing a combination of said non-programming field, said second non-programming field, said third non-programming field, and said fourth non-programming field with a pair of delimiters (see Table II and Table III: Winter discloses "comment line" as "non-programming field").

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 2, 4, 6, 7, 8, 12, 14, 16, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winter in view of U.S. Patent 6,873,630 issued to Muller et al (hereinafter "Muller").

Regarding claims 2, 4, 12 and 14, Winter discloses the claimed subject matter as discussed in claims 1 and 11 respectively. Winter also discloses comment lines as non-programming fields (see response to argument (b) above). Tables II and III show comment lines 1 – 4 or multiple comment lines that store parameters.

Winter does not explicitly frequency parameter as claimed.

However, Muller teaches storing a frequency parameter (see column 7, lines 18 - 20).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Muller's teaching of "storing a frequency parameter" would have allowed Winter's system to transfer data to and from entity at multiple gigabits per second as suggested by Muller at column 2, lines 11 - 14. The advantage is that this will allow the transfer rate of data to exceed the network traffic of 1 Gbps (see also column 1, lines 60 – 67).

wherein writing error checking signal are the parameters stored in non-programmable field. The motivation is that the error-checking signal is used to check

whether the data fields generated during a particular communication are allowed or forbidden by a communication protocol.

Regarding claims 6 and 16, Muller teaches error detection item is a cyclic redundancy check checksum (see column 14, lines 20 - 24).

Regarding claim 7, Muller teaches cyclic redundancy check checksum is configured to detect a bit swap within said file (Examiner submits that applicants define "Bit swapping " as "swapping of values" (specification page 10, line 21 - page 11 line 2). Muller discloses cyclic redundancy check (CRC) in column 12, lines 42 – 46. Muller also discloses exchange of data (column 7, line 40). Examiner interprets "exchange of data" as swapping of values. Therefore, Muller teaches a cyclic redundancy check checksum is configured to detect a bit swap within the file as shown in column 12, lines 42 – 46 and column 7, line 40).

Regarding claims 8 and 18, Muller teaches the step of storing an identification item configured to identify said programmable logic device in a second non-programming field of said file (column 7, lines 54 - 57).

Regarding claim 17, Muller teaches the storage medium according to claim 16, wherein said non-programming field is disposed in a first portion of said file, said programming item is disposed in a section portion of said file and said cyclic

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redundancy check checksum is disposed in a third portion of said file (Examiner submits that applicants' argument and claim limitations are not supported by the specification. The only mention of the word "dispose" in applicants' invention is in the background of the specification page 2, lines 8 – 11 which states **A common practice is to dispose of the original device programming parameters once the file has been verified as correct and the programmed devices have gone into production.** If applicants agree that this paragraph cited is the same as limitation of claim 17, Then this cited paragraph of the specification rejects claim 17 since it is well known in the art and common practice otherwise the claim limitation is not supported by the specification. Also refer to rejection under 35 USC § 112, first and second paragraph above).

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 571-272-4034. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred I. Ehichioya  
Patent Examiner  
Art Unit 2162

November 11, 2005

  
SHAHID ALAM  
PRIMARY EXAMINER